

AMENDMENTS TO THE CLAIMS

1. (Currently amended) Device A removable electrocoagulative anastomosis device for the production of anastomoses between first and second hollow organs comprising:

an inner sleeve to be mounted around the end of the first hollow organ such that the end can then be turned inside out to lie over the inner sleeve; an outer sleeve to be mounted around the end of the second hollow organ after the latter end has been arranged over the inside out end of the first hollow organs; the inner and outer sleeves each being made separable so that they can be removed after anastomosis formation has been completed, and comprising electrically conductive materials that can be connected to an external current or voltage source so that a current or a voltage can be applied to the electrically conductive materials for the electrocoagulation of the hollow organs that are to be connected to one another.

2. (Currently amended) The device ~~Device~~ according to Claim 1, wherein at least one of the inner sleeve and the outer sleeve is made substantially of the electrically conductive material.

3. (Currently amended) The device ~~Device~~ according to Claim 1, wherein at least one contact surface made of electrically conductive material is disposed on at least one of the outer surface of the inner sleeve and the inner surface of the outer sleeve.

4. (Currently amended) The device ~~Device~~ according to Claim 3, wherein the contact surfaces on the inner sleeve and the outer sleeve are arranged circumferentially.

5. (Currently amended) The device ~~Device~~ according to Claim 1, wherein at least one of the inner sleeve and the outer sleeve is constructed of pivotable components.

6. (Currently amended) The device ~~Device~~ according to Claim 5, wherein the pivotable components of the sleeves comprise catch elements to interlock in the closed position.

7. (Currently amended) The device ~~Device~~ according to Claim 1, wherein at least one of the inner sleeve and the outer sleeve comprises predefined breaking sites.

8. (Currently amended) The device ~~Device~~ according to Claim 1, wherein the outer sleeve is formed by a wire arranged in the shape of a loop.

9. (Currently amended) The device ~~Device~~ according to Claim 1, wherein the inner sleeve comprises fitting elements and the outer sleeve comprises fitting elements of complementary shape, which fit one another in the arrangement used during electrocoagulation.

10. (Currently amended) The device ~~Device~~ according to Claim 1, wherein at least one of the inner sleeve and the outer sleeve is made of a plastics material.

11. (Currently amended) The device ~~Device~~ according to Claim 1, wherein each of the inner and outer sleeves comprises ~~the contact surfaces of the sleeves are~~ made of stainless steel.

12. (Currently amended) The device ~~Device~~ according to Claim 1, wherein an apparatus is provided to measure the impedance between the contact surfaces of the sleeves.

13. (Currently amended) The device ~~Device~~ according to Claim 1, wherein a temperature sensor is disposed on at least one of the inner sleeve and the outer sleeve.

14. (Currently amended) The device ~~Device~~ according to Claim 1, wherein a control means is connected to one of the current source and the voltage source.

15. (Currently amended) The device ~~Device~~ according to Claim 14, wherein the control means comprises a time-switch.

16. (Currently amended) ~~The device~~ Device according to Claim 12, wherein the impedance-measurement apparatus is connected to one of the current source, the voltage source, and ~~a the controls means~~ connected to one of the current source and the voltage source.

17. (Currently amended) ~~The device~~ Device according to Claim 13, wherein the temperature sensor is connected to one of the current source, the voltage source, and ~~a the control means~~ connected to one of the current source and the voltage source.

18. (Currently amended) ~~The device~~ Device according to Claim 1, wherein the sleeves have a substantially cylindrical cross section.

19. (New) A removable electrocoagulative anastomosis system for electrocoagulative production of anastomoses between hollow organs, comprising:

an inner sleeve constructed to be positioned around a first hollow organ proximate an end of said first hollow organ such that said end can then be everted over an outer circumference of said inner sleeve;

an outer sleeve constructed to be positioned around and to substantially enclose an outer circumference of a second hollow organ that has been pushed over said inner sleeve and said everted end of said first hollow organ, wherein

said inner sleeve comprises a electrically conductive contact surface on said outer circumference of said inner sleeve,

said outer sleeve comprises an electrically conductive contact surface on an inner circumference of said outer sleeve, and

each of said inner and outer sleeves is constructed from at least two separable components that are separable from one another to permit removal of said sleeves from said first and second hollow organs after completion of said anastomoses.

20. (New) The system of claim 19, wherein

said electrically conductive contact surface of said inner sleeve extends around said outer circumference of said inner sleeve; and

said electrically conductive contact surface of said outer sleeve extends around said inner circumference of said outer sleeve.

21. (New) The system of claim 19, wherein said outer circumference of said inner sleeve and said inner circumference of said outer sleeve are smooth.

22. (New) The system of claim 19, comprising a regulated current or voltage source connected to said electrically conductive contact surface of said inner sleeve and said electrically conductive contact surface of said outer sleeve for effecting electrocoagulative anastomosis of said first and second hollow organs.